major non-conventionai energy programmes/schemed during the Ninth Plan period in Bihar are given in the Statement enclosed *(See* below). A total amount of Rs.7.82 crores was released for the implementation of various non-conventional energy programmes/schemes to Bihar during the Ninth Plan.

Statement

Details of physical achievements made under the major non-conventional energy programmes/schemes to Bihar during the 9th Plan period

SI. No.	Programme/Scheme	Achievement made during the 9th Plan period
1.	Biogas Plants (nos.)	3211
2	Improved Chulhas (nos.)	19,000
3.	Energy Parks (nos.)	10
4.	Integrated Rural Energy Programme Block (nos.)	56
5.	Solar Photovoltaic (nos.)	
	(i) Street Lighting Systems	106
	(ii) Home Lighting Systems	776
	(iii) Solar Lanterns	24,235
6.	Solar Photovoltaic Pumps (nos.)	38
7.	Water Pumping Windmills (nos.)	12
8.	Small Hydro Power (MW)	0.01

MW= Mega Watt

IOC Lab. at Lucknow

4893. SHRI DINA NATH MISHRA : Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether it is correct that the IOC Lab. at Lucknow has developed a new to-diesel based on extraction from Jatropha curcas plant;

(b) has the IOC also examined economic viability of the project and computed cost of its production *vis-a-vis* petro-diesel; and

(c) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRIM KANNAPPAN). (a) No, Sir. However, IOC R&D Centre at Faridabad has developed bio-diesel based on Jatropha oil by the process of trans-esterification on a pilot scale.

(b) and (c) IOC (R & D) has not done any systematic cost economic study to compute the cost of production of bio-diesel.

Bio-Diesel Urja

4894. SHRI SUDARSHAN AKARAPU : Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state.

(a) whether bio-diesel urja is being considered as an alternative fuel;

(b) if so, the details of research made in this connection; and

(c) the action taken to obtain its patent to ensure free availability in India with mass free plantation in rural wastelands ?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN) : (a) Yes, Sir.

(b) Research and Development activities are being supported by this Ministry in the country through different R&D organizations on the development of technology for characterization of different vegetable oils, conversion of different non-edible oils to bio-diesel, effect of these bio-fuels on the conventional engines, optimum level of bio-fuel blends to be used, etc.

(c) Efforts are being made for growing non-edible seed oil plants such as Jatropha Curcas, Karanja etc. on wastelands in the country. The Ministry of Rural Development which is responsible for wasteland development is working in this area.

Allocation of employees between M. P. and Chhattisgarh

4895. PROF. R.B. S. VARMA: Will the Minister of PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS be pleased to state:

(a) whether Government have received request from the State Government of Chhattisgarh/Madhya Pradesh with their No Objection for mutual allocation of employees between these States, and -

(b) if so, the legal administrative hurdles for not accepting such requests so far?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRI HARIN PATHAK): (a) and (b)